GENERAL WATER HEATER FLUSHING PROCEDURES

WARNING: Flushing your water heater presents a significant risk of injury. Please take all necessary precautions to protect yourself and others, and hire/consult a plumbing professional before beginning. Additionally, please note these instructions are general and provided for customers' convenience only. The City of Fresno and its Department of Public Utilities assume no liability regarding your use of these directions. The City of Fresno advises reviewing and following specific instructions in your water heater Owner's Manual.

- **Step 1.** If you are flushing an electric water heater, turn electrical power to the water heater off at the breaker box. If you are flushing a gas water heater, first note the setting on the thermostat, then turn the thermostat to the vacation / pilot mode setting or lowest setting possible without actually turning off the pilot light.
- **Step 2.** Allow the water heater to cool or take protective measures to protect occupants from scalding water. This can be done by turning on the hot water faucet of a bathtub, shower and/or sinks. This will replace the hot water with cold water in the water heater. Close bathtub, showers and sink faucets after this step is completed.
- **Step 3.** Connect a garden hose to the drain outlet valve at the bottom of the water heater, but do not open the drain valve. Place the other end of the garden hose in a convenient drain location someplace outside (for example: onto a lawn or garden area). Use a bucket to catch some of the sediments as it drains. **Note: The hose outlet must remain lower than the water level in the tank in order for the water to drain completely out of the water heater.**
- **Step 4.** Open the hot water side of your kitchen faucet (or the hot side of any faucet close to your water heater). This will allow air to flow back to the water heater stopping any vacuum in the water heater that will keep the water from flowing out of the drain.
- **Step 5.** Slowly open the water heater drain valve until it is fully open. As the water flows out of the water heater, look in the bucket to see how much sediment is being flushed out. **Note:** Due to the amount of possible sedimentation, the water heater valve may get clogged, in which case it will have to be cleared of sediment prior to proceeding.
- Step 6. Turn off the cold water supply at the top of the water heater and drain the water out of the tank. Examine the drained water to see if there is still sediment in the drain water. If the water still has sediment, repeat Steps 5 and 6 until the drain water runs clear of any debris. After all of the sediment has been drained from the tank, close the drain valve and remove the garden hose. Note: If the drain valve is not functioning properly, it may need to be replaced. If this is the case, replace it with a safety drain NOT a regular hose bib, as children or other people may not be aware of burn dangers associated with hot water heaters. Examples of Drain Valve Styles Which Should be Replaced with a Safety Drain:



- **Step 7.** When you are ready to refill the water heater, open the cold water supply at the top of the water heater and begin to fill the water heater tank. Check to make sure the drain is closed and does not leak. If the drain valve leaks, it could have sediment debris caught inside of it. In that case, turn off the cold water supply at the top of the water heater and clean the debris out of the drain valve. Re-open the cold water supply at the top of the water heater to confirm the leak is resolved, then fill the water heater.
- **Step 8.** As the water heater fills up, let the hot side faucet run until water runs clear of sedimentation and air thru the faucet. Turn on a few more faucets (hot side) in the house and let them run until water is clear. If the building is multiple stories, open a faucet in an upstairs room as well.
- **Step 9.** Remove and clean all faucet aerators of any sediment.
- **Step 10.** Once all air has been purged from the water lines and the water heater, start to heat the water. If your water heater is electric, turn the electricity back on to the water heater. If your water heater is gas, turn the thermostat back to the temperature setting noted when at the beginning of the procedures.
- **Step 11.** Clean up and wipe down all work areas as needed.